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IV.—STUDIES IN ETYMOLOGY.

I.

THE EUROPEO-ARMENIAN TREATMENT OF *tr*₂.

I.

στέλλω : $\begin{cases} \text{τελέθω} \\ \text{πέλομαι} : \text{τλάω} \\ \text{τέλλω} \end{cases}$

su-stul-it

ab-stulit

tollo, tulit, su latus

táratī, turáti, tulayāmi

trans

tirás : clam : πλά-γιος (?)

clādes, clandestinus

ἀ-στήρ

stella

stḡbḡs

Armen. *a-stl*

πλειάδες

**triones*

tāras

πέλαγος

πλάζομαι

taraḡga

celer : tāras

Lith. *kēlti, kēltas : celsus.*

Sk. *táratī* 'cross over' (river or sky) has not been heretofore connected with the above group of verbs. Collitz, BB. v. 101 fg., compares τελέθω with πέλομαι, from an I. E. $\sqrt{qel-}$. Homer uses both these verbs as a copula. Γ 3 κλαγγή πέλει οὐρανόθι 'the noise rises to heaven' and Η 282 νύξ τελέθει 'the night arises' connote, however, upward motion. Lat. *colo* 'till,' Sk. *cáratī* 'wander' (of leisurely motion), 'graze,' Collitz also compares. Neither *colo* nor *cáratī* has the sense of 'rise, cross over,' and, what will be of greater importance presently, no sense of rapid motion.

Joh. Schmidt, in KZ. 25, 138, added Grk. τέλλω, ἀνατέλλω 'rise' to this group, making the striking equation περιτελλομένων ἐνιαυτῶν = περιπλομένων ἐνιαυτῶν.

Fick, however, in the latest edition of his Wörterbuch, refers τέλλω to an I. E. stem *tela-*, which he defines by 'raise.'

But I cannot bring myself to separate the equivalent phrases *περιτελλομένων ἐνιαυτῶν* and *περιπλομένων κ. τ. λ.*, though I separate *τέλλω* from *colo*, Sk. *cáratī*. *Cáratī+ud* is, to be sure, one of the regular phrases for sunrise; with this Schmidt compares *ἀνατέλλω*. The words are, it seems to me, hardly on the same chronological footing. *Ud+√car* is freely used of the heavenly bodies from the earliest Vedic times. *ἀνέτειλε* 'caused to spring up (as food),' E 777, is an *ἄπαξ λεγόμενον*, and *ἀντολαί* 'rising places of the sun,' μ 4, is the same. For *ἀνατέλλω* of 'sunrise' L. and S. cite Hdt., Soph. and Aristoph., but Soph. uses *τέλλω* in the same sense. It is a fair, if not a cogent, inference that in *ud+√car* the specific idea of 'rise' comes from the preposition, just as in the precisely parallel *ud+√i*, *ud+√yā*; whereas *τέλλω* has this force without the need of composition with such a preposition as *ἀνά*.

At this point let us seek to fix the meaning of Sk. *√tr-* a little more definitely. In combination with *ava* 'off, down' we find a meaning 'descend,' especially used of the descent of a divine being to the earth; cf. the Anglo-Indian *avatar*. Does this sense derive from compounding *ava* with a general notion of motion, as in the combination *ava+√i* 'come down,' or does *ava* have a force comparable with that of German *ab-* in *absteigen*, or English *dis-* in *dismount*? Delbrück, S. F. v, p. 449, seems to decide for the former derivation. But the compound is susceptible of another interpretation, as e. g. *ava+√sā* 'bind' > 'unbind, take the yoke off horses,' which Delbrück makes 'take the horses (out from) under the yoke,' and *ava+√tan* 'string' > 'unstring (a bow)'; so *ava+√tr* 'rise' might suffer reversal to 'descend.'

Ud+√tr means 'come up out of (the water).' Here again it is questionable whether the signification 'rise' is partly inherent in the verb or wholly acquired from the preposition.

Even in the derivative *taraiṅga* 'wave, billow' it is difficult to decide between the sense of 'rising' and 'going across.'

In Lat. *trans*, e. g. *trans Rhenum*, *trans montes*, the sense is 'over' or 'across,' but just which sense is original it is impossible to decide. If we bear in mind the interchangeability of 'over' and 'across' in our own language, we can see why the primary signification of *√tr* is so hard to fix.

If we compare Sk. *√tr* with *τέλλω* and its congeners, one or two close coincidences of derived meaning present themselves. Böhtlingk, in the new dictionary, s. v. *tar*, defines 3) 'lay behind one (a road),' i. e. 'complete a journey,' e. g. *ṛtasya panthām na*

taranti duskrtaḥ 'evil-doers finish not the road of the *ṛta*.' Pind. Ol. 2, 126 *ῥτείλαν Διὸς ὁδόν* is an exact parallel. Out of this special usage comes the general meaning 'complete, fulfil,' which we have in *τέλος* 'fulfilment' and its verb *τελεῖν*.

στελλω in its causative sense 'raise' corresponds still more closely with *ῥίψω* 'rise.' Hesiod, Scutum 288 *ἐπιστολάδην δὲ χιτῶνας | ἐστάλατο* 'they have tucked up their tunics,' etc., is a capital example for this sense, and *ἐπιστολάδην* gives it a clinching force. γ 11 *ιστία . . . στείλαν* 'they took in sail' shows also the sense 'lift, raise.' Etymology comes to our help in the difficult question whether the Homeric ship had the yard fastened to the mast so that the furling was accomplished by raising the sail to the yard, or whether the yard and sail were lowered together in furling. For the former explanation see Smith's New Dict. of Antiquities, p. 218, s. v. *navis*. The causative¹ sense of *στελλω* 'raise' clinches the connection with *τέλλω* 'rise,' already advanced by Meister, Gr. Dial. II, p. 215, on the basis of the common meanings 'set, place, despatch.' *ἐπιτέλλω* 'enjoin, command,' Hom., and *ἐπιστέλλω*, same meanings, Aesch., Soph., Eur. and Thuc., is proof enough of this equation.

A very common use of *στελλω* is in the sense 'rig out a ship.' As a matter of definition, *στελλω* might be turned by 'launch,' i. e. 'make a ship swim on the water,' causative, as it were, to Böhtl.'s definition of *ῥίψω*, 2) 'float on the surface, swim.' It is simpler, however, to recognize that in the act of launching a small boat there is as much lifting as dragging. The sense 'launch' fits well β 287, where Athena says she is one *ὅς τοι νῆα θοὴν στελέω καὶ ἄμ' ἔψομαι αὐτὸς* 'to launch you a fleet ship, and go with you myself.' Later, describing other details, she says, vs. 295, *ὥκα δ' ἐφοπλίσσαντες ἐνήσομεν εὐρέϊ πόντῳ* 'and we will fit her out, and launch her in the broad sea.' Here *ἐνήσομεν*, as well as *ἐφοπλίσσαντες*, may be regarded as an expansion of *στελέω* in vs. 287. In ξ 247 Ulysses, speaking of his journey to Egypt, adds: *νῆας ἐὺ στείλαντα σὺν ἀντιθέοις ἐτάροισιν* 'featly launching my ships with the help of,' etc., and in the next line: *ἐννέα νῆας στείλα, θοῶς δ' ἐσαγείρετο λαός* 'nine ships I launched, and the folk came trooping together'—a long feast and sacrifice follows, and then the embarkation. If *στεῖλα*

¹ Greek and Latin have no real living causative conjugation; any verb is liable to have intransitive and transitive, i. e. causative, force. In Sk. *ῥίψω* has causative force without the causative sign *-dya-*; cf. Böht. P. W., s. v. *ῥίψω*, 9).

does not signify 'launch,' then there is no mention of 'launching.' Against the interpretation 'launch,' the nine days' duration of the festivities speaks.

The comparison of *τέλω* 'lift, bear' (in a transferred sense also) with *τέλλω*, *tollo* is not new. See Fick's Wörterbuch, s. v. *tela*-.

The following are coincidences of meaning between *√tar* and *tollo*: Böhtl. P. W., s. v. *tar*, 6) 'get possession of, overpower (enemies)'; *tollo* 'make away with, destroy'; *√tar*, 9) 'carry one over or through': *tollo* 'take up a child (to save it alive).' *Suscipio* may be regarded as a translation of *tollo* 'save,' to suit the technicalities of Roman family life. The custom of saving or destroying infants (by exposing) was Indo-European; cf. Zimmer, *Altind. Leben*, p. 319 ff.

It is perhaps not going too far afield to compare *tollere diem* (Cic. Leg. 3. 18. 40) 'to consume the day (in speaking)' with R.V. 5. 45. 11 *tarema çatam himāḥ* 'may we complete a hundred winters.'

By accepting the equation of *στέλλω* with *tollo* we are enabled to explain the form *su-stulit*. Here we have a reduplication as in *ἴ-στημι*, but the vowel has been affected by the root-vowel *su-stulit* < **se-stulit*; cf. *spo-pondi* < **spe-pondi*.¹ On the other hand, Lat. *su-stulit* may reflect the original type, and we may regard **spe-spond-i* as refreshed out of an original type **se-spondi* or **pe-spondi*. *Ab-stulit*, *ab-scido*, O. E. *scidan*, Germ. *scheit* 'cut,' *ab-stergo* 'wipe off'; *strigilis*, *στλεγγίς* 'scraper,' furnish a starting-point for *abs-* before other verbs that never possessed an *s* initial.

Su < *b* > *lātus* is a contamination of **stlātus* and *su-stulit*, and a popular etymology made it *sublatus*.

Regarding the semasiological similarity between Sk. *tarati*, Gr. (σ)τέλλω (in some of their senses) and Lat. *tollo* as sufficiently established, let us now examine the phonetic processes involved in comparing them.

I begin with *τέλλω* = *πέλομαι*, or rather *περιτελλομένων* = *ἐπιλομένων*. The explanation of Collitz, out of an original *velar*, is entirely satisfactory from the phonetic point of view, but Sk. *√car* signified a leisurely, wandering, horizontal motion, whence its application to the grazing of cattle. In Gr. *βουκόλος* 'cow-herd,' *αἰπόλος* 'goat-herd,' Lat. *o-pilio* 'shepherd' < *ⁱovi-pilio* (with a *p* due to Oscan influence; cf. Brug. I, p. 321), we see a derivative noun meaning 'pasturer.' In *agricola* 'tiller of the soil' we must

¹ Cf., however, *infra* p. 479.

recognize a civilization advanced a trifle beyond the nomadic stage. Gr. πολεύω 'turn up land with a plough, plough,' πολέω, *ditto*, and πόλος 'land turned with a plough' are fossils from the same age of civilization; πελεθρον 'a square measure of land' is doubtless to be referred here also. Out of such compounds as βουκόλος it was easy for Greek to impart the notion of speed into our root. The prehistoric *ιπποπόλος was doubtless a horse-rider and racer, whence Homeric κελης 'race-horse,' afterwards transferred to the other racing sphere, κελης 'light, rapid boat.' Lat. *callis* 'path trodden by cattle, mountain-path'; 'mountain pasturage' is the passing-note for still another possible derivation of meaning to *celsus* 'lofty,' etc. κολωνός 'hill,' Lith. *kálnas*, Lat. *collis*, have also, perhaps, reached their meaning by the *callis*-path, if I may be pardoned the pun. The hills were the grazing places of the cattle. Sophocles fames Κολωνός as εὔπιπον, εὖπωλον, Oed. Col. 711. My friend, Dr. Kirby Smith, has called my attention to the following passages in Latin lyric. Cuique pecus denso pascebant agmine colles, Tib. Eleg. IV 1, 186; jungere et in solito pascere monte pecus, *ibid.* I 2, 72; Quid tibi cum speculo montana armenta petenti, Ov. A. A. 1, 305. Further passages are Ov. Met. 2, 841; 3, 408. Similarly, to use a modern instance, the word *pasture* always implies 'hill, mountain' in Vermont. In point is also 'Lebt wohl, ihr Berge, ihr geliebte Triften.' As O. E. *hyll* shows, this sense was already reached in the I. E. time. Cf. Sk. *cāraṇa* 'pasturing.'

Sk. *cāraṇa* 'path, road' is perhaps to be compared with *callis* < *qəl-ni*. It is to be remarked that Sk. √*car* shows no forms with lingual vowel save *cīrná* (Upan.). *Cultus* may derive from **colitus* > **collus*, but, in composition, *adcultus*, etc. It is not necessary to deny the kinship of κέλευθος, and κελεύω 'order' may be perhaps connected with βουκόλος, etc.

Sk. √*car*, however, shows no trace of the meaning 'rise' which was claimed above to be the primary signification of τελλω, τελέθω and Sk. √*tr*, for *caraṇa*- 'pillar' derives from the meaning 'goer, foot,' and so probably does Lat. *columen*. I repeat again that the characteristic notion of I. E. √*qel* is that of leisurely, wandering motion. We find a Greek representative of this root in πλαγάω 'wander, roam,' denominative to πλάνη 'roaming.'¹ πλάνη: √*qel* :: ὕπνος: √*svep*.

¹πλάνη does not occur in literature till Aesch. and Hdt. πλανάω is an ἀπ. λεγ. in Hom. Ψ 321—a late book; cf. Jebb, Hom., p. 124.

But how are we to mediate between Sk. $\sqrt{t\tau}$ and $\pi\epsilon\lambda\omicron\mu\alpha\iota$? A Greek $\sqrt{\tau\epsilon\lambda-}$ would in its reduced stage become $\tau\lambda-$. But this is a group particularly difficult of utterance in initial position. Meyer, in his *Organs of Speech*, p. 326 (Appleton's Science Series), characterizes this group as follows: "These (i. e. the groups $\phi\lambda$, $\iota\lambda$, $\kappa\lambda$ and $q\lambda$) are all formed easily at the commencement of words if the mouth is adjusted for the λ position before the formation of the explosive, so that the liberated air, in passing over the dorsum of the tongue, will produce the sound of λ . The only difficulty lies in $\iota\lambda$, for the apex of the tongue, which had been removed from the palate for ι , has to be instantly replaced for the formation of λ , and thus a small hiatus can scarcely be avoided." . . . 'This combination is mostly confined to names derived from the ancient language of Mexico.'

Apart from theoretical phonetics, we have the actual practice of Latin and Lithuanian, where $\iota\lambda$ is converted into $\kappa\lambda$ in the interior of words, and, as I shall hope to show, initially also; cf. Brug. Gr. I, pp. 281, 288.¹ Greek $\tau\lambda\acute{\alpha}\omega$ seems to vouch for the Hellenic mastery of $\tau\lambda$. Greek furnishes also a very limited number of suffixes in $-\tau\lambda\omicron-$, e. g. $\acute{\alpha}\nu\tau\lambda\omicron\varsigma$ 1) 'bilge-water,' 2) 'bucket'² (cf. $\acute{\alpha}\nu\tau\lambda\omicron\iota\omicron\nu$ 'bucket' in Aristophanes), $\chi\acute{\upsilon}\tau\lambda\omicron\varsigma$ 'liquid' (< 'to be poured') and $\epsilon\chi\acute{\epsilon}\tau\lambda\eta$ 'handle.' $\acute{\alpha}\nu\tau\lambda\omicron\varsigma$ contains, I believe, the $\sqrt{\tau\epsilon\lambda-}$ in its suffix, and derives from the meaning 'to be raised up' its sense of 'bilge-water,' whence 'hold,' the place of the 'bilge-water.'³ $\chi\acute{\upsilon}\tau\lambda\omicron\varsigma$ seems to be a late epic analogon of $\acute{\alpha}\nu\tau\lambda\omicron\varsigma$. Possibly $\epsilon\chi\acute{\epsilon}\tau\lambda\eta$ 'plough-handle' is a combination of derivatives from $\epsilon\chi$ 'a handle to hold by' and $\tau\epsilon\lambda$ 'a handle to lift by.'⁴

The permanence of the initial group in $\tau\lambda\acute{\alpha}\omega$ is capable of explanation even on the theory that the Greek tongue did feel the difficulty of the group and avoided it. Beside $\tau\lambda\acute{\alpha}\omega$ are the forms $\tau\acute{\alpha}\lambda\alpha\varsigma$ 'suffering' > 'wretched' and $\tau\acute{\alpha}\lambda\alpha\nu\tau\omicron\nu$ 'lifting machine' > 'scales,' which derive from $\tau\lambda\lambda-$. Further, $\xi\tau\lambda\eta$ and $\tau\acute{\epsilon}\tau\lambda\alpha\mu\epsilon\nu$ were susceptible of the syllabication $\xi\tau-\lambda\eta$, $\tau\acute{\epsilon}\tau-\lambda\alpha\mu\epsilon\nu$, thus allowing for the unavoidable hiatus of $\tau\lambda$ (cf. supra Meyer, l. c.). In $\tau\lambda$ forms we might expect a difficulty of articulation. In Latin that diffi-

¹ The apparent exception $\acute{\iota}\lambda\acute{\alpha}\tau\upsilon\varsigma$ < $\iota\lambda\acute{\alpha}\tau\upsilon\varsigma$ will be discussed below, under 'Splendidus and its Congeners.'

² Is $\pi\acute{\epsilon}\lambda\lambda\alpha$ 'milking-pail, cup' a congener of $\acute{\alpha}\nu\tau\lambda\omicron\varsigma$ 'bucket' from the $\sqrt{\tau\epsilon\lambda}$ 'lift'?

³ Cf., however, Brug. Gr. II, p. 113.

⁴ $\chi\acute{\upsilon}\tau\lambda\omicron\varsigma$ and $\epsilon\chi\acute{\epsilon}\tau\lambda\eta$ may well proceed from $*\chi\upsilon\theta\lambda\omicron-$, $*\epsilon\chi\epsilon\theta\lambda\omicron$. The latter almost certainly does. Cf. $\gamma\acute{\epsilon}\nu\epsilon\theta\lambda\omicron\nu$.

culty results in *cl*, but as in Greek λ exerts a labializing influence on *q*, it would scarcely exert a palatalizing influence on τ. Alliteration would have been a further compelling motive in combinations of, say, *τλόμενος with ἐπὶ and περὶ. An analogous change is shown by West Germanic and Norse *fl* < *pl* < *tl*, e. g. O. H. G. *flēhan* 'fondle, flatter, beseech,' Goth. *gaþláihan* 'fondle, comfort, exhort,' Brug. Gr. I, p. 287.¹

The change of initial *tl*- to *cl*- for Latin is on the same phonetic basis as the change of interior *tl*.

Out of a Gr. *τλ° > πλ° a new series would be evolved: πλ°, πελ-, πολ- beside *τλ°, τελ-, τολ-; out of a Latin *tl*°, in the same way, *cl*°, *cel*-, *col*-; e. g. °πλομενος : πέλομαι : πόλος.

Leaving the ground of analogies in other languages, a very striking instance of this change in Greek is furnished by δλ° > βλ°, in Aeolic βλήρ : δέλεαρ 'bait.' I see no good reason for separating δέλεαρ from δόλος 'trick,' but, μ 252, 'bait.' Osc. *dolum*, Lat. *dolus*, O. Norse *tál* belong to the same group. Cf., however, Brug. Gr. I, p. 318, who claims a connection with βάλλω < I. E. √ *gcl*. Joh. Schmidt's comparison with O. H. G. *quērdar* 'bait' (KZ. XXV 153, but accessible to me only in Kluge's synopsis, Wört., s. v. *köder*) involves a dissimilation out of *δέραρ, *δέρετρον, and does not seem to me to be forceful enough to separate δέλεαρ from δόλος.

I take the following equation to be certain at any rate. Hom. βλωθρός 'tall' = Sk. *dīrgh-a* 'long'—reported also to be the name of several varieties of trees and grass. βλωθ-ρο- is < **dǵh-ro*-. O. Blg. *dlugu* 'long' is from the same stem. Lat. *longus* < **dlongus* shows perhaps the stem of the compv. *drāghiyāhs* (cf. *longius*), with infixes nasal. For θ instead of φ in βλωθρός cf. Brug.'s explanation of ἐλαθρός (Hesych.), I, p. 320. Of course, the connection of δολιχός with *dīrgha* is not affected by the further association of βλωθ-ρός. Brugmann, however, I, p. 245, compares βλωθ-ρός with Sk. *mūrdhan* 'head,' and Kluge, Wört., s. v. *lang*,

¹ It seems to me possible to equate Goth. °*þláihan* with O. Bulg. *tlǎšti* 'tap, knock' and Gr. *πλίσσομαι* 'knock with the feet, trot,' vgl. μ 318 αἱ δ' ἐν μεν τράχων, εὐ δε πλίσσοντο πόδεσσιν 'And they ran well, and pattered merrily with their feet.' My command of Slavic lexical material does not enable me to learn whether this explanation is impossible for *tlǎšti* or not. The transfer of meaning from 'strike, pat, tap' to 'fondle' and 'beseech' is not difficult. Cf. 'love-licks,' *πλεκώω, σπλεκώω* 'of sexual intercourse' may be for *πλικώω*, popularly interpreted in the light of *συμπλέκω* 'have sexual intercourse with.' O. Bulg. *tlǎka* beside *tlǎšti* is probably for *tlǎka*; cf. Lesk., Hdbch. Abg. Sprach., §§11, 2, 5; 19.

denies the connection of *longus* with *dīrghá-*. The Lat. *lago* 'a sort of clematis' has perhaps the weak stem = **dī₃h-*. Cf. above what is said of the definitions of *dīrghá-*.

Under the phonetic conditions above urged, the following comparisons are submitted: *πέλαγος* 'wave' > 'sea': Sk. *taraṅga* 'wave'; cf. Hom. ε 335 νῦν δ' ἄλός ἐν πελάγεσσι θεῶν ἕξ ἔμμορε τιμῆς 'and now, 'mid the waves o' the sea, the gods yield her honor.' Sk. *taraṅga* does not occur in any of the accented texts. We may, however, infer its accent from *patāṅga* 'bird': √*pat* 'fly,' variously reported as paroxytone and oxytone, paroxytone *patāṅga* coinciding with Brugmann's latterly much attacked rule of *ṇ* under the accent (Gr. I, p. 195). In terms of Brugmann's rule, *πέλαγος* was an original oxytone, shifted, like *πέλεκυς* and *ἔλκτρον*, to proparoxytone; cf. Wheel., Gr. Nom. Acc., p. 110. The suffix *°ḡgo-* is also preserved in Lith., e. g. *vargīngas* 'miserable': *vaĩgas* 'misery,' where the accent is paroxytone. Whether my comparison of *πέλαγος* with *taraṅga* should be accepted or not, the I. E. character of the suffix *-°ḡgo-* has, I think, been demonstrated (cf. Brug. Gr. II, p. 261). In Lat. *prop-inquus* the nasal vowel is perhaps to be recognized before the suffix *-go-*. Brug. Gr. II, p. 261, rem., suggests a relationship between *-go-* and *-qo-*.

With this explanation of *πέλαγος* is combined a possible one of *πλάζομαι* 'wander' < 'to be wave-tost.' Eng. *waver*: *wave* shows another facet of the same signification. The connection with *πλάγιος* will come later into discussion.

Sk. *tīrás* 'over, past, beyond, through' = Zend *taro* are undoubted congeners of the √*tṛ*. Eng. *beyond* means 'more than, except.' Murray, New Eng. Dict., s. v. *beyond*, β 9) puts it as follows: "in negative and interrogative sentences almost = 'except,' e. g. Shaks. Hen. VIII, III i 135 'Bring me a constant woman to her husband, One that ne'er dream'd a joy, beyond his pleasure.' Carlyle, Sart. Res. II vi 'No prospect of breakfast beyond elemental fluid.'" Lat. *praeter* as adverb and as preposition means 'beyond, more than, except.' The various adverbial derivatives of the √*per*, to which *praeter* belongs, illustrate very fully the semasiological developments of the root of which *tṛ* is the Aryan representative. The √*per* I define as 'pass by,' in which action there are three stages—the motion towards one, the motion past or by (before) one, and the motion from or beyond one; all the various ramifications of meaning reduce to one of these three: Sk. *parás*, adv. 'beyond, afterwards'; prep. 'beyond,

more than, except'; *purás*, adv. 'in front, forwards'; prep. 'before'; *purá*, adv. 'before, hitherto'; prep. 'before (temporal), before (in defence of), except'; *pári*, adv. 'round about'; prep. 'opposite, beyond (past), more than,' and the grammarians report the meaning 'except,' and a distributive force as in *εἰς ἑκάστην εἰς ἑκάστην παρί σιῖνκατι* 'he sprinkles tree after tree,' cf. Gr. *ἡμέραν παρ' ἡμέραν* 'day after day'; *pra* 'before, forwards, on past'; *πέραν* 'across, over, over against'; *πέραν* 'beyond, across, more than'; *παρά* 'beside, by, at' (e. g. *παρά θύρῃσιν* 'before the door,' *παρ' οἴνῳ* 'over wine'), along (*τρέψας πᾶρ ποταμόν* 'turning along the river'), beyond (*πᾶρ δυνάμιν* 'past his strength'), 'except' (*οὐκ ἔστι παρὰ ταῦτ' ἄλλα* 'there is nothing except this'); *περί* 'roundabout, around, beyond (= more than)' (e. g. *περί πολλοῦ ποιείσθαι*); *πρὸς* so nearly covers *παρά* that no examples need be given: it may be remarked in passing that *per vim* and *πρὸς βίαν* 'by force' are etymological as well as syntactical parallels, and so are *per Jovem* and *πρὸς Διός*, in asseveration and ascription of agency; a by-form of *πρός* is *πάρως* < *πῆρως*: Lat. *por* in *por-rigo* 'put before one,' *porrectus* 'laid out' > 'dead'; *porro* 'forward, onward'; *per* 'exceedingly,' e. g. *permultus*, *permagnus*, *perceler*; cf. Hom. *π 186* *πέρι μὲν θεῖεν ταχύν* 'passing swift at running.' Eng. *passing* is a perfect parallel, e. g. "O passing traitor; perjured and unjust," Shak. 3 Hen. VI, V i 106; "This Ewein was a passinge faire childe, and bolde and hardy," Merlin (E. E. T. S.), II 238; "For she was passing weary of his love," M. Arnold, Tristram and Iseult (cited from the Cent. Dict., s. v. *passing*); *per-fidus* 'un-faithful' mirrors just as accurately *παρὰ δίκην* 'contrary to right,' *παράνομος* 'lawless'; *per-rexi* 'I went forward'; *pro* 'before, in front of (for defence)'; *prae* 'before'; for *prae* in *prae-clarus* cf. *per-magnus* above; *prae-ter* 'past, beyond, more than, except.' Lat. *pernix* 'nimble, fleet' may well be a derivative of the *√per*. A stem *perno-* is extended to *pernīgo-* > *pernīc-*.

Now the Aryan *√tr* has had much the same line of development as I. E. *per-*; *tr* was employed of vertical motion, *per*^o of horizontal, and the former doubtless extended to any motion in a vertical or obliquely rising direction. We have seen above in the semasiology of *trans* how 'over a mountain' became 'over a river'; a bird 'rises, shoots up, shoots *through* the air, crosses the sky'; 'over the mountain' was 'out of sight.' Sk. *tirás* has all these significations, 'through, on through, past, beyond, except, cross-wise, secretly'; *tirás* + *√kr* 'overpass, surpass,' etc. For Greek

we have one stage of development in $\pi\lambda\acute{\alpha}\nu$ 'except,' to be explained as an acc. adverb from an $-a$ stem. Certain it is that $\pi\lambda\acute{\alpha}\nu$ can have no phonetic relation with the stem of $\pi\lambda\acute{\epsilon}(\xi)\omega\nu$. In $\pi\lambda\acute{\alpha}-\gamma\iota\omega\varsigma$ 'cross-wise, deceitful' we have another shade of meaning. Certain elements in the semasiology of $\pi\lambda\acute{\alpha}\zeta\omicron\mu\alpha\iota$ might connect it as well with $\pi\lambda\acute{\alpha}\gamma\iota\omega\varsigma$ as with $\pi\acute{\epsilon}\lambda\alpha\gamma\omicron\varsigma$.

For the semasiology of $tir\acute{a}s + \sqrt{k}\eta$ 'despise, look down upon' we may compare Grk. $\acute{\iota}\pi\epsilon\rho-\phi\rho\omicron\nu\acute{\epsilon}\omega$ 'despise.' Eng. *over-look* has *over* in precisely the same force.

It has been the fashion, where the Europeo-Armenian group shows l and the Aryan group r , to attribute l to the parent-speech, I suppose on a sort of democratic plan, but this is, after all, a mere convention (cf. Brug. Gr. I, §254). In Sanskrit l gains on r constantly (Wh. Gr.², §53 *b*). Why, then, believe there was an earlier Aryan tendency when r gained on l ? With the explanation of *trans* as belonging to a Eur.-Arm. $\sqrt{t}el$, we gain a new point of view. Let us present to ourselves a state of things in which there was an r_2 verging toward l , then a root ter_2 would pass into tel , tol , but the difficulty of tl made the stage tr_2 a laggard. Any isolated form might then loose the bondage of phonetic law; or we might put it that tr_2 regularly went into tr° , unless dragged by tel , tol - into tl° . Now, *trans* is just such an isolated form, for Meister, by his explanation of $\tau\acute{\epsilon}\rho\mu\alpha$, Gr. Dial. II 213, has deprived it of its supposed Greek and Latin congeners.

Interesting testimony for a serial $cl^\circ < tl^\circ$, cel is furnished by equating *celer* with *tarás* 'quick.' The suffixes are, it will be seen, identical; $\kappa\acute{\epsilon}\lambda\eta\varsigma$ 'race-horse,' with which *celer* is generally compared, has been explained above in a different way.

clam 'secretly' shows a very close kinship of meaning with *tirás* and of form with $\pi\lambda\acute{\alpha}\nu$: (*haud*) *clam me est* 'it is (not) unknown to me' is a close parallel to Eng. 'it is beyond me' > 'past my comprehension.' In combination with $\sqrt{d}h\bar{a}$ *tiras* signifies 'drive away, conquer.' If we suppose *clam* to be extended by the s so common with prepositions and adverbs, e. g. $\epsilon\kappa : \acute{\epsilon}\xi$, then we may explain *clādes* 'disaster, defeat' as out of $*clandsi-s$. To this formation Sk. furnishes abundant parallels; e. g. *antar* 'within' + $dhi < \sqrt{d}h\bar{a}$ = 'concealment, disappearance'; *pari* 'about' + dhi = 'enclosure'; *ud* 'up' + dhi = 'seat of a wagon'; *ni* 'down' + dhi = 'setting out (down) food.' *tiro-dhā* 'concealment' < 'setting aside' is a closely allied formation. In $*clandsi-$ we have a different meaning, but one very close to *tiras*

+ $\sqrt{dhā}$ 'conquer.' Indeed, the grammarians report a **tirohita* 'one who has taken flight,' which presents the same facet of meaning as *clādes* 'rout.'

But in *clandestinus* 'secret' we have the very force of *tiro-dhā*. *Clandestinus* is composed of *clam* + a stem *-des-*. For the stage **clandes-*, Sk. *vayo-dhās-* 1) adj. 'health-giving,' 2) nom. 'strengthening,' *puro-dhas* '*one set before' > 'house-priest,' **payo-dhas* 'water-holder, sea,' *reto-dhas* 'semen-implanting' are sufficient testimony. The next stage in Latin was the addition of the *to*-suffix, as in *mod-es-tus* : *modo-s*, *vetus-tus* : *vetus*, st. **vetes-*; cf. Brug. Gr. II, p. 392. **Clandes-* was 'concealment,' **clandeslo-s* was 'one concealed.' To this the suffix *-ino-* was added, as *divīnus* : *divo-s*. *Libertinus* : *libertus* is a precisely parallel formation.

The connection is thus broken between *clam*, *cēlo* and *oc-culo*, with their Germanic congeners O. H. G. *hēlan*, e. g. *Oc-culo* could be phonetically connected with *clam*, but a reason for not doing so lies in the fact that Sk. *tāratī* never shows a force 'conceal,' either in or out of composition.

Pro-cella 'hurricane, onrushing wind' shows the same meaning as Sk. *taraṇi* 'pressing forwards,' and so does *percello*, e. g. *ventus percellit* 'the wind rushes past, overpowers.' It is possible to connect Lat. *celsus* 'lofty' with *collis*, *callis*, above explained, out of I. E. \sqrt{gel} . It is possible, too, to explain from I. E. \sqrt{ter} , 'rise,' trans. 'raise.'

In Lithuanian also the group *tl* became *kl* (Brug. Gr. I, p. 288), and thus I explain *kēlti* 'raise' and *kēlta-s* 'elevated.'

Let us turn now to a consideration of the words for 'star,' which I believe must be associated with the group above discussed. The comparison of *πλειάδες* 'the pleiades' and **triones* in *septem triones* 'the seven stars, the great Bear' has not heretofore been made. Cf. King and Cookson (Sounds and Inflexions, p. 203), who compare **triones* with *stella*. The phonetic question is to be solved as for *πλάν*, *trans*, above. *Πλειάδες* is perhaps an extension from an *-ižen*-stem, just as **triones*. The *-ei-* is an affection of popular etymology, perhaps, from *πλείω* 'to sail.' The lengthening in Hom. *πληϊάδες* is doubtless due to de Saussure's *loi rythmique*, e. g. *σοφώτερος* < **σοφοτερος*. Greek *ἀ-στερ-* never became **ἀ-στελ-*, because it was felt to be an agent noun in *-ter-*. So the retention of *r* in the Germanic languages is to be explained. Latin *stel-la* may be from **ster-la* (cf. *agellus* to *ager-*), or it may be original. The Armenian is *a-słλ-* where *λ* is a *tertium quid*,

neither *r* nor *l*. Its phonetic worth is unknown to me (cf. Brug. Gr. I, p. 27). In *ελν* 'stag': *ἐλαφος* and in *αλυῆς* 'fox': *ἀλώπηξ* this *λ* agrees with Gr. *λ*. The only other occurrences of this *λ* cited by Brug. Gr. I, p. 216, are in the combination *λθ* = I. E. *bhr*, where we may explain the affection as due to the labial. By my explanation *a-stλ-* falls with Gr. *λ*, not with *ρ*.

In Sk. *tāras* beside *stṛbhis* we have the initial variation as in *τέλλω* : *στέλλω*.

We reach from these comparisons the sense 'riser, mover across the sky' as the primary one of the words for 'star.' Sk. *tarānī* 'sun' has had the same semasiological development as *tāras* 'stars.'

By the equations submitted I do not wish to deny all connection of (σ)τέλλω with Sk. *√car*. Certain meanings of the former, e. g. 'send, despatch,' correspond with Böht.'s P. W. definition of the causative of *√car*. 2) 'put in motion,' 5) 'cause one to practise something'; with the sense of 'dress' (στολή) we can compare *colo*, which has the same connotation. It is interesting, too, to know that Sk. *√car* appears in the Māitrayaṇī Saṁhitā in the form *√scar-*, that is to say, with an initial sibilant. We may regard (σ)τέλλω as containing relics of both the roots *qel* and *ter*.

In Sk. *tṛ* I believe we have also relics of I. E. *ter* 'penetrate' (cf. *τέρετρον* 'gimlet,' *τόρπος* 'lathe-chisel,' Lat. *terebra* 'auger,' Sk. *tīras* 'through') and *ter*₂ 'rise' as discussed above. *turātī* is the phonetic representative of *tṛr*₂, and *tirātī* of *tṛr*-. There is, doubtless, no trace of this difference of signification in the verb-forms, for the notions of motion over (obstacles) and motion through (obstacles) enabled the verbs to thoroughly assimilate even in the non-transferred meanings. The epic *torāṇa* 'arch' has the sense of 'rise' implicit in it; *tulā* 'scales,' which occurs, according to Whitney's Verb Roots, in Brāhmana, shows the sense 'lift,' causative to 'rise.' The vocalization in *torāṇa* and *tolayati* 'weigh' is a secondary analogical gradation to *tur-* < *tṛr*₂ and *tul* < *tur* < *tṛr*₂.

II.

Splendidus AND ITS CONGENERS, WITH AN EXPLANATION OF *Vṛddhi* IN SANSKRIT.

Sk. *prathitā*, *prāthas* : *πλάτος* : *splendidus*, *splendor* : O. Ir. *less*.

πλῆθος : *lātus*, *plānus* : Lith. *plėsti*.

pr̥thū : *πλατύς* : Lith. *platūs* : O. Ir. *lethan*.

ὠμο-πλάται : *latus* : O. Ir. *less* : O. Blg. *plašti*, *plešte*.

The Sk. \sqrt{prath} means 'broaden,' its ptc. *prathita* 'broadened, wide,' and in a transferred sense 'glorious, famous, splendid.' With the latter sense *splendidus* agrees in its so-called transferred meanings. The primary meaning is retained in *lāt-us* 'broad.' The transferred meaning of *splendidus* may, however, be that of 'shining,' as when we speak of a 'glorious day, sun,' etc. Chronologically, to judge by the citations in Lewis and Short, the sense 'shining' emerges in Latin literature earlier than 'glorious.' Perhaps, on this account, we had better regard 'shining' as an extension of 'spread out': an 'outspreading' that is a 'brilliant' body—the sun, say, like the rayed pictures one makes of the sun.

The phonetics involved in the equation of *prathitā* to *splendidus* is as follows; The I. E. root was $\sqrt{pr_2ath}$. Lat. *splendidus* did not become **lendidus* (cf. *lien* : $\sigma\lambda\eta\nu$), because of its use in compounds, e. g. *re-splendeo*. It must be borne in mind that Sk. \sqrt{prath} combines very freely with prepositions. In Latin the nasal verb system has forced its way even into the ptc., cf. *junctum*. In the present case the nasal was an affix, **splaⁿto-* > **splaⁿdo*, as in *pando* 'open out' : *pateo* 'be open' < **patno*; cf. Brug. Gr. II, p. 152. From **splaⁿdo* came a participle **splaⁿditus*, whence, by progressive assimilation, **splaⁿdidus*¹; cf. the regressive assimilation in *coquo* < **quequo* < **pequo*.

We have now the more difficult question of the vowel to be recognized in this root. Bechtel, in his *Indoger. Lautlehre*, pp. 242, 244, on the basis of $\pi\lambda\eta\theta os$ 'multitude, extent' and Lith. *plėsti* 'make broad' : *platūs* 'broad,' makes it fall in an *ē-ā* series. According to the nomenclature of the Brugmann school this *ā* is *a*. If Bechtel means to compare $\pi\lambda\alpha\tau\acute{u}s$ directly with Lith. *platūs*, as he seems to do, he severs the connection with Sk. *pr̥thu*. The

¹ The large class of Lat. adjectives in *idus* may have had this origin. *Splendidus* would have easily influenced *candidus* 'shining' : *candeo*, *nitidus* 'glittering' : *niteo*, *rubidus* 'reddish' : *rubeo*, *sordidus* 'dirty' : *sordeo*, etc. In many of these words the *-do-* < *-to-* may have proceeded by an independent assimilation to a preceding *d*, as in *sordidus*, or *ll*, as in *pallidus*, which latter would be dialectic, as in *oleo* 'smell' : *odor* 'scent'; cf. V. Henry's *Comp. Gram.*, p. 65. Zumpt meant perhaps to recognize the participial nature of these words in *-idus* by giving them in §176 of his *Lat. Gram.*, along with their corresponding verbs. In §249, however, he does not explain himself in this way. I agree with V. Henry, *Comp. Gram.*, p. 162, note 3, as to the improbability of a connection between this suffixal *-do-* and the $\sqrt{do-}$ 'give.' Sk. *jalada* 'water-giving' is doubtless a popular etymology; cf. Brug. Gr. II, p. 383.

The purely adjectival sense of a ptc. to a verb meaning 'to be such and such' would aid in the transfer of *splendidus*, etc., to a purely adjective category.

form *πλᾶθος* labors under the suspicion of being hyperdoric or hyperaelic; cf. Cauer, *Delectus*, 437, 18. On the Cretan decrees granting rights to the Teians, who were Ionians, the tendency of the Teian stone-cutters was to substitute Ionic *η* for *â*. The form *πλᾶθος* in such a decree, Cauer 123, 18, resisted the tendency to 'hyperionism.' The form *πλῆθος* is, however, amply vouched for by Doric and Aeolic inscriptions. On my assumption that *πλᾶθος* is the original, the explanation of *πλῆθος* is very simple: nothing closer in language than the notions of fulness, multitude and extent. *πλῆθος* in Doric and Aeolic was a popular etymology with *πλή-ρης*, where the *ῆ* is Indo-European; cf. *plē-nus* 'full.' Now, in Lithuanian *plėsti* the same association with the *√plē* 'to fill' has been at work. Lith. *platūs*, Sk. *prathu-s* 'broad' are the same formation. *prathu-s* may have been an affection of *prithu* by *prathiṣṭa*. Grk. *πλάτος* 'breadth' and Sk. *práthas* we may regard as belonging to the normal grade. Further examples of the normal grade are Lat. *lātus* < **splatus* (cf. *lien* : *σπλήν*) 'side' < 'broadside' and Grk. *ὤμοπλάται* 'shoulder-blades.' Of the deflected grade we have examples in *πλᾶθ-ος* 'breadth' > 'multitude,' *lātus* 'broad' < **splātus*, a formation entirely analogous to Grk. *ᾠδύς*, Lat. *suāvis* < **suādū-is*, and O. Blg. *plašti* < **plātti* 'mantle, covering for the shoulders': *plešte* 'shoulder.' The vowel in *plešte* is derived possibly in the following way: An early Slavic gradation *ā* : *ā* became *ō* : *ā*; another gradation was *e* : *o*. By mediation of *o*, interchange between *ā* and *ē* was easy; in this way *plešte* may come from **plātīo*-.

Old Irish preserves this stem very faithfully. Stokes has already derived *léss* 'light' < **plent-to* and compared *splendor*, BB. 14, p. 313. In **plent-to le* is the representation of I. E. *l*, which sometimes appears in Irish in this form; cf. Brug. Gr. I, p. 238. Windisch, in Curt. Gr. Etym., compared O. Ir. *lethan* 'broad' with *πλάτος*, etc. It proceeds from *pl̥t̥h₂no-*, as does probably *πλάτανος* 'plane-tree.' *Less* 'hip, haunch' proceeds from *pl̥tes-*; *lāt-us* in the normal grade has a cognate signification, 'side, flank,' represented for O. Ir. by *leth* 'side, half.'

Lat. *lātus* calls for some especial explanation because of the report of Paul. ex Fest., p. 313: *stlata*, genus navigii *lātum* magis quam *altum*, et a latitudine sic appellatum sed ea consuetudine qua stlocum pro locum, et stlitem pro litem dicebant. We know that the ships of war were long and narrow for speed. Juvenal's *stlataria purpura* 'imported dye,' i. e. 'costly' (cf. McKinley

Bill?), suggests that the *stlā/a* was the ship of commerce, adapted to bearing loads. This *stlāta* may very well be from the same root as *τλητός*. I give it an active meaning, 'bearing,' which suits very well the kind of ship indicated. The active use of the suffix *-to-*, though not common in Greek and Latin, need not surprise one. It is quite common in the Avesta as a suffix of agency; cf. e. g. Vendidad, II 7-10: *vīsaṇhi mē yima srīra*, [*vīvaṇhana*] *mārato bərətaca daevayāi* 'come unto me, famous Yima, thou learner and upholder of the faith.' *τλητός* 'enduring, patient' is a Greek case directly in point. The three stages of the treatment of *stl°* in Latin are mirrored by *stlis* > *slis* (twice on inscriptions) > *lis*.

Tlatie, Umbr. gen. sg. to the proper name Lat. *Latium*, has been formerly connected with *lātus* 'broad,' so Brugmann, in his Grundriss, I, p. 281. The connection with *τλητός* is quite proper, but, as we have argued, *lātus* comes from **splātus*. For the sense of *Tlatie* Bücheler, Umbrica, p. 114, compares *τελεσφόρος* 'fruit-bearing.' I would so explain *Tlatie*, *Latium* as the 'bearing, fertile land,' not the 'broad land.' Roman popular etymology had doubtless established a connection with *lātus* 'broad.'

Lat. *plānus* I also connect with the $\sqrt[p]{p_r}_2ath$ < *plātno-*. The treatment of the group **tn°* in Latin is not a little difficult; cf. Feist, Got. Etymologie, s. v. *apn*. Lat. *anno-* is derived by Brugmann, Gr. II, p. 137, from *at-sno*, cf. *penna*: Old Latin *pesna* < *petsna-*. But Festus, as cited in Lewis and Short, gives *petna* equally as an old form. Who shall say what is the relation between *petna* and *pesna*? The most natural development of **tn°* would be *nn*. But we can operate on *plāt-sno-*, whence, seeing the vowel is long, we would have only a single *n*, as in *mīsi* < **mitsi* beside *mīssus* < **mit*to-*. *aēnus* < *aēs-no* might lead one to expect *pēna* < *pesna* < *pet-sna*, but the chronology can doubtless be suitably arranged. *Prōnus* < **prōd-no-* (?) and *ra-mentum* < **rādmento-* shed light on *plānus* < **plāt-no*.

I draw attention to the value of this etymology for gradation. The number of examples in the *ā*: *ā* row is not very great. In Greek *ἄγω* 'lead, drive': *κυνᾶγός* 'huntsman': *ὄγμος* 'furrow' with prothetic *o*: *δάος* < **daFos* 'fire-brand': *δέδηκε* < **deḏaFe* 'it burns': *δύη* 'misery.' These are about the only examples where Greek shows all three grades. Between Greek and Latin all the grades can here be made out: *lātus* 'side, flank,' *ὐμοπλάται* 'shoulder-blades': *lātus* 'broad,' *πλάθος* 'breadth': *πλάτυς* 'broad.'

It remains to point out, in this connection, a possible explanation of *vr̥ddhi* in Sanskrit, where *ā* represents the *o* of the European languages. I do not agree with Brugmann in explaining Sk. *ā* in open syllables as the representative of I. E. *o*. Let us assume for the proto-Aryan period a series *an*, *ān*, *ṇ*, *n* being symbolic of zero, *i*, *u* the liquids and nasals, and beside that a series *en*, *on*, *ṇ* > *an*, *ān*, *ṇ* where the normal and deflected grades reach the same value. It is obvious that the two series become identical in the normal and weak grades: what easier, then, than assimilation between the deflected grades? We have, for example, to the *√bhaj*, *bhājati* in the normal grade, *babhāja*, *abhākṣit*, *abhāk*, *bhājayati* in the deflected grade. Influenced by such forms we have *babhāra*, *abhārṣit*, *abhār*, *bhārayati*. Sometimes the influence of the *e-o* series was predominant. Sk. *√prath* has no forms where we should expect *prāth**, save the caus. *prathayati*. This may be explained from the prevalence of the middle voice in this verb, where we have always a weak stem; cf. Whit., Verb Roots, s. v. *√prath*. The Sk. roots of the *ā-ā* series seem all to have ended in a single consonant, or with a semi-vowel (*i*, *u*, etc.), as the examples in Hübschmann, Indog. Vokalsystem, show. Hence it is that the assimilation did not take place in closed syllables.

The existence of *vr̥ddhi* in the Europeo-Armenian period has been deemed possible on the basis of *lēxi*, *rēxi*, *tēxi*, O. Blg. *nēsū*, *rēchu*, *pogrēsū*, etc., Brug. Gr. I, p. 256; Bechtel, Indog. Lautlehre, p. 157. There seems to me no cogency in this opinion: the Lat. forms are more than easily explained as of secondary origin. *Ēgī* < **eagī*, *sēdī* < **sezdī* are lengthenings of an organic nature. A very large proportion of perfects in **si* were from roots with long vowels (diphthongs), e. g. *dīxi*, *dūxi*, *fixi*, *frīxi*. There was every enticement to lengthening *lēxi*, etc. The simplex *lēgī* beside *lēxi* makes it quite likely that *tēxi*, etc., are syncretic formations from **tēgī* + **lēxi*. It is noteworthy that the forms in question are confined to stems in *g*. The popular etymology of *lēxi* was doubtless **leg-zī*, for which *lēxi* may have been the orthographic representation. *lēxi* shows a syntactic contamination of pf. **lēgī*, aor. **lēxi*, as well as a morphological, which is perhaps a way of accounting for 'Pure' and 'Aorist' Perfects. Surely no one dreams of interpreting the quantity in *tēctum*, etc., as original.

The O. Blg. forms are likewise possible of explanation without the resort to *vr̥ddhi*. In *bodq* : *basū* the *a-ā* relation obtains; in

čitq : *čisū* we have *i* and *ei*; in *vrūzq* < **vīrzq* : *vrēsū* < **versū* we have *r* and *er*. The transition from these roots with *r* to roots without *r* was perhaps made through *rekq*. The impv. (opt.) *rici* < **rgois* stands in the same relation to aor. *rěχū* as *žipi* to *žpěχū*, however the vocalism of the pres. *rekq* is to be explained. The extension was now become easy *rekq* : *rěχū* (< **erχū*?) :: *nesq* : *nēsū*.

Again, the relation of *e-ě* may have been patterned on the proto-Slavic *ā-ā*.

It has been seen, then, that Latin and Slavic aorists give no help for a belief in European *vrddhi*. The 3d sg. pf. act., where in Sanskrit *vrddhi* is at home, shows for Greek always the deflected, not a lengthened stage, save in, so far as I know, the example γέγωνε 'is capable of being perceived, heard'—surely an insufficient evidence.

The Indian grammarians¹ report that the 2d sg. perf. was liable to accentuation on any of its syllables, and forms like *dadītha* and *tenītha*, not in the earlier language, amply support this view to the believer in the origin of gradation from musical accent. Where there is any gradation as between the persons of the sg., the 2d person is weak. Perhaps the grammarians attributed accentual variations between the 1st and 3d persons to the 2d. Sk. *babhāja* (3d sg.) < **bābhāja*, Gr. δέδα(F)ε, but for the earlier language, in the 1st pers. almost exclusively *babhāja*, etc. The I. E. speech certainly had strong 1st and 3d persons for the non-thematic present system, and their accent was on the root. What wonder that this accentual relation stamped itself upon the perfects also! The primordially of Sk. accent is certainly open to suspicion under conditions where analogy was sure to produce assimilation.

We may represent the original conditions to ourselves as follows: A. In the *ā-ā* series, 1st pers. **b(a)bhāg̃m*, Sk. *babhāja*; 3d pers. **bābhāge*, Sk. *babhāja*; the accent of the 1st pers. prevailed; the reduplication and ultimately the vocalization of the 3d. B. In the *e-o* series, 1st pers. *t(e)-tēpm*, Sk. *tatāpa*; 3d pers. **tēlope*, Sk. *tatāpa*, cf. Grk. τέτοκε; 1st pers. **r₁i-r₂ēiqm*, Sk. *ri-rēc-a*; 3d pers. **r₂ēiroiqe*, Sk. *rirēca* (with reduplication affected by the 1st pers.), Grk. ἐλοιπε (with reduplication generalized from the τέτοκε type). A'. In the *ā-ā* series, 1st pers. *i(a)-iāg̃m*, Sk. **iyāja* (to be inferred from *tityāja*); 3d pers. **iā(?)iāge*, Sk.

¹ Whit.², p. 283 fg.

**yayāja* (to be inferred from *vavāca*, R. V., *vavāpa*, *vavāha*, epic); 3d sg. middle **iaī(a)gāi* = Sk. *yejé*; 1st plur. *r₂eir₂iqmā*, Sk. *riricmā*, Grk. **δεδιμέν* > *δέδιμεν*. B'. In the *e-o* series, 1st pers. **u(e)u₂qm* = Sk. *uvāca*; 3d pers. **u₂uoqe*, Sk. *vavāca* (R. V.), but usually *uvāca*, where the 1st person reduplication prevails. C. In regard of the *√vid*, it may be remarked that *ειδώς*, *ειδέναι*, *ειδῶ* may be interpreted as formed from a 1st pers. **F_{ei}da* before its assimilation to *Foīde*. D. As a corollary to the above explanation of *yeje*, we may set up an explanation for Sk. perfects of the *petús* type (Wh.² 794 g); *sedús* < **sezdús* or **s₂gdús* was another starting-point. *papāta* : *petús* :: *sasāda* : *sedús* :: **yáyāja* : *yeje*.

In Grk. and Sk., as in the parent speech, the reduplicating syllable was felt to give the temporal distinction, and was generalized, and so the deflected grade was extended from the 3d pers. throughout the sing. But in *véda* : *Foīda*, which had reached a present signification in the parent speech, the reduplication was lost. In Goth. the vowel-change was felt to give sufficient temporal distinction, and the reduplication was, for the most part, lost.

III.

Grk. *πέρθω* 'sack, destroy, kill' : Lat. *perdo* 'destroy' : Sk. *√sprdh* 'strive in rivalry, contend, fight.'

Pott, KZ. 26, 174, suggested that *πέρθω* was a combination of the root of *τίθημι* and an unknown preposition, and compared Lat. *perdo*.

The agreement of the words under discussion is absolute from the phonetic point of view as soon as we recognize the initial variants *^p_{sp}*.

The Sk. loc. plur. *pṛtsú* is, I take it, an isolated form from the *√^p_{sp}rdh*. The root-noun *sprdh-* 1) 'battle,' 2) 'enemy' has in R. V. the forms *sprdh-i* (loc. sg.), *sprdh-ás* (acc. plur.), *spṛdhas* (nom. plur.) and *sprdhām* (gen. plur.) Out of the isolated loc. plur. *pṛt-sú* < *(*s*)*pṛdh-sú* a stem *pṛt* was extracted, whence *pṛtanā* 'battle.' This must have happened in the Aryan period, for we have Zend *pešana* < **pṛtanā*. In Zend verb-forms were also constructed on this stem, for which Justi sets up a Zend *√parat*, which in the weak grade is *√peš*. The form *spared-* = Sk. *spardh-* occurs once.

The senses of Zend *√parat* are 1) 'fight,' 2) 'hasten on.' Both senses derive from the primary sense 'strive in rivalry' in the

different spheres of battle and racing. Zend *pešana* means 'hostile'. The Grk. and Lat. representatives of this root have derived their sense of 'sack, destroy, ruin' along the same lines of hostile rivalry. Lat. *perdo* has been assimilated in inflection to *abdo*, etc. A *perdo* of a not greatly different sense is, however, derivable from the combination of *per*+*do*-; cf. what has been said above in 1) about *per*, etc.

IV.

vi+ \sqrt{bhr} (intensive) '*bear apart' > 'move to and fro, brandish': *vi-bro* 1) trans. 'shake, brandish,' 2) intrans. 'quiver, tremble.'

Vibro has been heretofore connected with Sk. \sqrt{vip} - 'tremble.' No phonetic change of *p* before *r* is provable for Latin, however, and so the explanation of *vibro* as denominative < a stem **vipro*- is untenable. I propose instead a division into a preposition *vi*+*br-ā-*. This *-brā-* stands in the same relation to *fero* as *ῥᾶ* : *ῥᾶλω* in Greek. Note, too, that the Latin frequentatives are all of the 1st conjugation; *vibro* is, to be sure, not from a supine stem, as the others.

For the appearance of the preposition *vi* in Latin compare Pott's explanation of Lat. *vito* 'shun' < *vi+ita* 'gone apart,' KZ. 26, p. 154.¹

V.

vi-nc-io 'to bind' : *nec-to* 'bind.'

Nec-to is congener to Sk. \sqrt{nadh} , in some way that does not here concern us, gutturalized in Latin. A perf. *nexi* in composition with *vi*^o would give us *vinxi* < **vi-nc-si*; cf. *reppuli* < **repe-puli*, *surpui* < **sub-rapui*. From *vinxi* to *vincio*, *vincit* is an easy step; cf. *spexi* and *specio*, *specit*. That *vincio* should then inflect after the manner of the 4th conjugation is a question to be solved for *venio* and other underived verbs. The effect of *vi*^o in the combination is not easy to see. Perhaps the notion was that of binding to an object *away* from one; we might compare Eng. *tie up*, which comes to mean 'tie to an elevated object'; Sk. *vi*+ $\sqrt{sañj}$ = 'hang up, suspend' and simple $\sqrt{sañj}$ = 'cause to hang, attach, suspend'; cf. Delbrück, Synt. Forsch. v, p. 467. *vinxi* is, then, 'tie up,' i. e. to an object above one or away from one.

¹ This explanation of *vito* I reached independently, but am glad to be able to cite it, on Pott's authority, in confirmation of my recognition of the prep. *vi* in Latin.

VI.

vīvo : vic-si, victus.

I add to my already printed explanation of these words (Am. J. Phil. XIII, p. 226) the following note, an explanation of the guttural in O. E. *cwicu*. This I take to be a contaminated form. The reduplicated ptc. **cwecwenð-* and **cwīwo-*, the congener of Lat. *vīvos*, Goth. *quiūs*, were coexistent at some period. Now, *cwicu* is the result of a contamination of **cwīwo-* and **cwēcwenð* > **cwicenð* under the influence of the weak stem **cwecunð*.

AUSTIN, TEXAS.

EDWIN W. FAY.